U.S. Customs and Border Protection

**Report to Congress on
the Automated Commercial Environment (ACE)
First Quarter 2006**

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1. Legislative Requirement

The Automated Commercial Environment (ACE) Report to Congress is provided quarterly in accordance with the requirement set forth in House Report 109-79, which states:

> The Committee believes that ACE and CBP modernization should be integrated, if not form the core, of DHS information system and border security technology, including the Container Security Initiative and Automated Targeting Systems. The Committee directs CBP to address such issues in its quarterly reports on ACE implementation progress.

H. R. Rep. 109-79, at 31 (2005).

In addition, the ACE Report to Congress satisfies section 311(b)(3) of the Customs Border Security Act of 2002, which requires that:

> Not later than 90 days after the date of the enactment of this Act, and not later than the end of each subsequent 90-day period, the Commissioner of Customs shall prepare and submit to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate a report demonstrating that the development and establishment of the Automated Commercial Environment computer system is being carried out in a cost-effective manner and meets the modernization requirements of title VI of the North American Free Trade Agreement Implementation Act.

Customs Border Security Act of 2002, Pub. L. No. 107-210, § 311, 116 Stat. 933, 973 (2002).

This report also complies with Government Accountability Office (GAO) Report 04-719, Customs Modernization, May 2004, which requires U.S. Customs and Border Protection (CBP) to report on the status of open GAO recommendations.

2. Executive Summary

The Report to Congress on ACE provides an update on ACE accomplishments, challenges, fiscal status, and upcoming program milestones. Most significantly, the report demonstrates how ACE is helping CBP achieve the DHS strategic objectives, and is providing CBP personnel in the field with enhanced capabilities to better accomplish the CBP mission of preventing terrorism and facilitating legitimate trade and travel.

Congress has stated that ACE and CBP Modernization should be integrated with, if not form the core of, DHS information systems and border security technology. Accordingly, this report also addresses the ongoing CBP efforts to integrate ACE with other systems and engage other Government agencies to participate in the ACE/ International Trade Data System (ITDS). The report also includes the status of efforts to resolve GAO open audit recommendations. Overall, the report provides a status of progress against program commitments. As such, it is one of several key plans and reports that collectively comprise the accountability framework for the Modernization Program.

The Report to Congress on ACE is provided to the Senate Finance Committee, House Ways and Means Committee, and both the House and Senate Appropriations Committees. The reporting period for this update is October 1, 2005, to December 31, 2005. A review of previous reports may be helpful in understanding the full context of the information provided in this edition of the report. Appendix A outlines ACE capabilities.

Notable in this Report

ACE truck cargo processing capabilities are now operational at 31 Northern and Southern land border ports following recent deployment to key ports in Michigan, including the Windsor Tunnel and Fort Street Cargo Facility (Ambassador Bridge), in Detroit, as well as Port Huron, Marine City, Algonac, and Sault Ste. Marie.

CBP completed the Screening Foundation (S1) Production Readiness Review (PRR) on December 22, 2005. Completion of the PRR initiated the pilot of S1 capabilities, which include a state-of-the-art rules engine and enhanced screening capabilities for all manifest and entry transactions.

On October 24, 2005, CBP announced the creation of non-portal ACE accounts. Non-portal accounts will enable importers to benefit from the ACE periodic monthly statement capability without having to first establish an ACE Secure Data Portal account.

Over 80 users from 12 Participating Government Agencies (PGAs) now have read-only access to certain ACE data. PGA users are able to view and run over 30 reports that draw from entry and entry summary data collected via the ACE Secure Data Portal.

3. Background

In 2001, the U.S. Customs Service (now part of CBP) embarked on ACE as its first project in a multiyear modernization effort to reengineer agency business processes and the information technology that supports them. The initial plan was to focus first on ACE and trade processing and then on other elements of CBP Modernization, including enforcement. The terrorist attacks on September 11, 2001, changed this focus. ACE is being developed to support the CBP mission of: <u>(1) protecting the American public against terrorists and the instruments of terror and (2) enforcing the laws of the United States while fostering our Nation's economic security through lawful international trade and travel.</u>

With the establishment of DHS, CBP has also aligned ACE with the DHS mission and strategic goals. ACE will help reduce our Nation's vulnerability to threats without diminishing economic security by providing threat awareness, prevention, and protection for the homeland. Specifically, ACE will help:

- Detect, deter, and mitigate terrorist and other threats;

- assess vulnerabilities to homeland security and the American public;

- safeguard U.S. citizens and critical infrastructure from acts of terrorism; and

- serve the public by effectively facilitating the movement of lawful trade.

Working closely with other Government agencies and the trade community, CBP is modernizing to enhance interagency information sharing and analysis, replace and/or supplement existing systems taxed by increasing demands, and comply with legislation requiring greater agency efficiency and effectiveness to better serve the public. Among other capabilities, CBP personnel will have automated tools and better information to decide – before a shipment reaches U.S. borders – what cargo should be targeted because it poses a potential risk, and what cargo should be expedited because it complies with U.S. laws.

4. Performance

This section highlights the alignment of ACE with the 1993 Customs Modernization Act (Mod Act), selected program accomplishments, and actions related to the open GAO recommendations.

4.1 Compliance with the Customs Modernization Act

The 1993 Mod Act was passed with legislation implementing the North American Free Trade Agreement. The Mod Act is the legal foundation for the CBP Modernization effort and promotes the concepts of "informed compliance" and "shared responsibility". This

requires CBP to provide accurate and timely information on CBP roles and responsibilities to the trade community. It also requires the trade community to use reasonable care in fulfilling their compliance obligations. To help accomplish these objectives, the Mod Act outlined requirements for automation and emphasized electronic trade processing. The delivery of ACE capabilities will fulfill the Mod Act by providing a secure Web-enabled environment. ACE is providing new capabilities to government users and the trade community by enabling the redesign of trade compliance processes and strengthening Screening and Targeting (S&T) systems. These are key requirements for enhancing border security and expediting legitimate trade. Appendix B shows how ACE releases are aligned with the Mod Act and will fulfill its requirements upon the completion of ACE.

4.2   Selected ACE Accomplishments

The following are selected program accomplishments between October 1, 2005, and December 31, 2005:

- **Expanded cargo processing in ACE at the Northern Border.** CBP deployed e-Manifest: Trucks capabilities to key ports in Michigan, including Windsor Tunnel, Barge Transport, and Fort Street Cargo Facility (Ambassador Bridge) in Detroit, as well as Port Huron, Marine City, Algonac, and Sault Ste. Marie, bringing to 31 the number of land border ports now using ACE to process cargo and conveyances.

- **Completed the PRR for Screening Foundation (S1) capabilities**. CBP completed the S1 PRR on December 22, 2005. Completion of the PRR enabled the initiation of the pilot of S1 capabilities in preparation for transition to full system production mode on February 9, 2006.

- **Created non-portal accounts.** On October 24, 2005, CBP announced the creation of non-portal ACE accounts. Non-portal accounts will allow importers to pay duties and fees monthly through a broker without having to first establish an ACE portal account, provided that the broker has already established an ACE Secure Data Portal account.

- **Completed the Preliminary Design Review (PDR) for key Entry Summary, Accounts, and Revenue (ESAR) (Release 5) capabilities.** The PDR for ESAR Master Data and Enhanced Accounts, and Entry Summary and Revenue capabilities was successfully completed on November 10, 2005. Completion of this milestone demonstrated that, based on an Enterprise Architecture Certification review, the architecture for these capabilities is sufficient to guide detailed design work.

- **Completed the Project Initiation and Authorization Review (PIRA) for Targeting Foundation (S2).** On December 8, 2005, CBP successfully completed the PIRA for S2, indicating that S2 is ready to move to the project definition stage. S2 will fully implement the Targeting Framework, a prototype that the National Targeting Center

is using to expedite the process for responding to Requests for Information and provide screening of Entry Summary data.

- **Provided ACE Secure Data Portal Access to Participating Government Agency (PGA) Users.** Over 80 users from 12 PGAs now have read-only access to ACE data, enabling them to view and run over 30 existing reports that draw from cargo entry and entry summary data.

- **Established the Automated Targeting System (ATS) as the targeting platform for all targeting and analysis.** CBP enhanced ATS to provide a robust platform for all targeting and analysis. The Data Integration Services Manager has been added to ATS to integrate and standardize large quantities of disparate data, enabling targeting systems to automatically ingest data from many more sources. In addition, CBP added the Metadata Knowledge Enterprise to ATS to provide knowledge management and visualization capabilities to manage and infer relationships between entities.

- **Initiated the Advance Trade Data Initiative (ATDI) Phase 3.** CBP initiated the Phase 3 prototype for ATDI, which provides additional insight into supply chain information that can be used for advance targeting purposes. Phase 3 uses geo-spatial capabilities to show the location of a specific container on a world map; the dates of the container's movement as it is transported by vessels and moves through countries, cities, and ports; and additional details on the container's movement through the supply chain. This data is being used to assess the value of the linked information along the trade supply chain and to identify anomalies that may signal an illegitimate shipment or a potential terrorist threat.

- **Completed programming for the Foreign Trade Zone (FTZ) automated admission & cargo control system.** The Office of Information and Technology (OIT) accelerated development of this new application (originally planned as part of Exports and Cargo Control (Release 7)), which will improve collection and reporting of information on goods admitted into FTZs. When implemented, the FTZ application will provide the electronic equivalent of CBP Form 214 for goods entering FTZs. As such, it will reduce paper document handling, improve the efficiency of FTZ processing for the trade community, and enhance the agency's screening and targeting capabilities for goods entering FTZs.

- **Enhanced ACE operational capabilities.** CBP introduced additional ACE enhancements that support compliance with the Food and Drug Administration Bio-Terrorism Act; allow service providers to submit e-manifests on behalf of carriers; and enable Electronic Data Interchange (EDI) transmissions to contain multiple manifests, provide In-Bond export capability, and provide release notifications at in-bond destination ports.

4.3   Open GAO Recommendations

OIT is actively addressing the following open GAO recommendations:

4.3.1   Cost Estimating

GAO Recommendation: Develop and implement a rigorous and analytically verifiable cost-estimating program that embodies the tenets of effective estimating as defined in the Software Engineering Institute's institutional and project-specific estimating models. Ensure that future expenditure plans are based on cost estimates that are reconciled with independent cost estimates.

OIT has established a disciplined cost-estimating process. This process includes a Life Cycle Cost Model (LCCM), which enables an independent government analysis and validation of primary cost and schedule estimates. The LCCM is also used to develop CBP Modernization Expenditure Plans. In its March 2005 report, the GAO reported that Modernization Program independent cost estimates either satisfied or partially satisfied all of the Software Engineering Institute's criteria for cost estimating. Additionally, the GAO found that the Modernization Program had implemented its recommendation that the Fiscal Year (FY) 2005 Modernization Expenditure Plan be based on cost estimates that are reconciled with independent cost estimates. The GAO will revisit this recommendation as part of its review of each Modernization Expenditure Plan.

4.3.2   Human Capital Management (HCM)

GAO Recommendation: Immediately develop and implement a human capital management strategy that provides both near- and long-term solutions to the program office's human capital capacity limitations.

As reported in the previous edition of this report, OIT has completed the second and final phase of a reorganization that established six program offices aligned to major mission areas. Two of these program offices are responsible for the Modernization Program; the Targeting and Analysis Systems Program Office (TASPO) is directing the development of S&T releases, and the Cargo Systems Program Office (CSPO) bears responsibility for development of ACE cargo processing capabilities. The reorganization has strengthened the Government's oversight of ACE by significantly expanding the number of government personnel responsible for ACE development activities and augmenting functional and program management expertise.

The OIT human capital effort remains grounded in the established HCM Strategy and the 10 human capital principles emphasized by the GAO (January 2000 GAO report Human Capital: Key Principles from Nine Private Sector Organizations). OIT is expanding on ACE program office successes by developing an enterprise-level Strategic HCM Plan. In addition, OIT is using the Project Management Body of Knowledge to define roles and responsibilities for all Senior Executive Service and GS-15 program managers across CSPO and TASPO. Completion of this effort is

expected to enhance existing ACE performance management, training, recruitment, and retention efforts.

The federal employees managing the ACE Modernization Program continue to develop their skills in acquisition and program management. Twenty-one government staff members have completed the OIT-sponsored Program Management Education and Certification Program, and an additional 8 will graduate in January 2006. Nineteen participants in this program have achieved Project Management Professional (PMP) certification by the Project Management Institute. One staff member has achieved DHS level III certification in acquisition management, and another has achieved level II certification.

4.3.3   Use of ACE Infrastructure for DHS

GAO Recommendation: Take appropriate steps to have future ACE expenditure plans specifically address proposals or plans to extend or use ACE infrastructure to support other homeland security applications.

To date, no expenditures have been planned for ACE to support other homeland security applications. Nonetheless, the ACE program continues to coordinate with other homeland security system programs in four areas. First, the overall DHS cargo screening information technology architecture will be coordinated by a DHS Chief Information Officer (CIO) Council subcommittee. Members of this subcommittee, chaired by the CBP CIO, will include the CIOs of the Transportation Security Administration and U.S. Coast Guard, as well as representatives from the office of the DHS CIO. ACE program managers will be supporting this subcommittee. Second, ACE S&T capabilities are being integrated with ATS. The result will be a modernized ATS based on a modular, service-oriented architecture that can easily be leveraged across the Department. The modernized ATS will provide new S&T capabilities and enable greater flexibility to more rapidly incorporate emerging technologies in the future. Third, OIT is coordinating ACE implementation with the existing support for the Container Security Initiative (CSI) via existing production systems, including the Automated Manifest System and the ATS. When completed, ACE All Modes and Cargo Security (Release 6) and S&T capabilities will support the automation requirements of the CSI program. Fourth, CBP continues to coordinate with other Federal agencies through ITDS and the United States Visitor and Immigrant Status Indicator Technology (US-VISIT) program, in particular. Joint ACE/US-VISIT coordination activities include monthly program integration meetings focusing on integrated master schedule management, risk, Earned Value Management (EVM), measurement, and process improvement, including the use of Lean and Six Sigma process and quality improvement best practices in the daily operation of both programs. Quarterly executive meetings continue to focus on program budgeting, operations and maintenance, and infrastructure.

4.3.4   Measurement of Program Management Improvement Efforts

GAO Recommendation: Define measures, and collect and use associated metrics, for determining whether prior and future program management improvements are successful.

Initial efforts to respond to this recommendation focused on ensuring that the Government could measure the progress of the e-Customs Partnership's implementation of the 2003 Performance Improvement Action Plan. Toward this end, OIT increased its emphasis on EVM analysis at ACE program level performance reviews, including the monthly program management review. In addition, OIT implemented a systematic program to continually improve the quality of data from its EVM system for the Modernization Program. Consistent with Office of Management and Budget directives, and the President's Management Agenda, the EVM system is used to predict potential future performance, plan for and implement corrective actions, and assess whether management changes have positively affected cost and schedule performance.

As ACE cargo processing capabilities are fielded at land border ports, OIT is also increasing its focus on measuring the extent to which ACE is meeting anticipated performance objectives. OIT is currently developing a baseline for operational performance parameters and has set targets for ACE business outcomes, which are included in the Modernization Acquisition Program Baseline, as well as Appendix D of this report. OIT has completed a Modernization Measurement Plan that provides a comprehensive description of how it will measure the Modernization Program and the work of contractors contributing to modernization efforts. The plan consists of three key elements: measures, management approach, and enabling technologies. As such, it details the types of measures that will be applied to the Modernization Program, the alignment of these measures with department and agency goals, how the measures will be managed, what software tools will be used, and how measurement data will be used to manage the ACE program. The Modernization Measurement Plan is the implementing directive for the development of the ACE Accountability Framework, which is described below in Section 4.3.6, ACE Program Accountability Framework.

4.3.5   ACE Program Quarterly Reporting

GAO Recommendation: Report quarterly to the House and Senate Appro-priations Committees on the efforts to address open GAO recommendations.

CBP has been providing quarterly reports on ACE since November 2002 in response to report language to accompany annual Appropriations Acts, the Customs Border Security Act of 2002 (for the House and Senate authorizing committees), and the GAO reporting requirements indicated in this recommendation. DHS directed that CBP route the quarterly reports through DHS, beginning with the March 2003 report. DHS then sends the report to the Office of Management and Budget (OMB) for review and approval. The DHS Assistant Secretary for Legislative Affairs transmits the report to Congress once all reviews are completed.

4.3.6   ACE Program Accountability Framework

GAO Recommendation: Define and implement an accountability framework that ensures future ACE releases deliver promised capabilities and benefits within budget and on time.

As indicated in its response to the March 2005 GAO report on ACE, CBP takes its "contract with Congress" and the program commitments reflected in ACE expenditure plans seriously. To develop ACE capabilities sooner at less cost, and ensure those capabilities hit the mark when fielded, sound decision processes and clear quality standards have been established. OIT has followed its established processes to balance quality, cost, and schedule objectives. CBP is building on the existing program management foundation to address the following six expected outcomes that the GAO detailed as part of this recommendation:

- Define and implement an ACE accountability framework that ensures coverage of all program commitment areas, including key expected or estimated system (1) capabilities, use, and quality; (2) benefits and mission value; (3) costs; and (4) milestones and schedules. CBP has developed an accountability framework that will be used by CBP leadership to help manage the ACE program and report its status to various stakeholders. The accountability framework tool depicted in Appendix E provide consistent, transparent reporting on ACE capabilities, cost, schedule, EVM indicators, risks, mission values and benefits (relative to Department and agency strategic goals), and business performance measures.

- Ensure the currency and completeness of program commitments made to the Congress in Expenditure Plans. The FY06 Modernization Expenditure Plan is consistent with the ACE Program Plan. Additionally, CBP will review the Expenditure Plan throughout the approval process to ensure that it incorporates the most current program commitments upon delivery to the Department, OMB, the GAO, and the Congress.

- Establish reliable data to measure progress against commitments. OIT has combined Problem Trouble Report (PTR) tracking under a development team, which has greatly improved establishing, assessing, and reporting on data that assists in measuring the progress of ACE development. In addition, OIT continues to develop a measurements dashboard to organize performance measurement indicators that are captured in accordance with the aforementioned measurement plan. The web-based dashboard will facilitate the dissemination of business performance measurements that provide insight into customer satisfaction, realization of desired business results, technology/stability of fielded ACE capabilities, and specific ACE release measures. When fully operational, the dashboard will help forecast and identify program areas that require corrective action. The dashboard will also be the primary data source for accountability framework slides that will contain information on ACE capabilities, cost, schedule, EVM indicators, risks, mission values and

benefits (relative to Department and agency strategic goals), and business performance measures. The relationship between the measurement dashboard, accountability framework tool, and aforementioned measurement plan is illustrated in Figure 1, below. An illustration of the types of metrics that will be reported through the accountability framework tool is included in Appendix E.
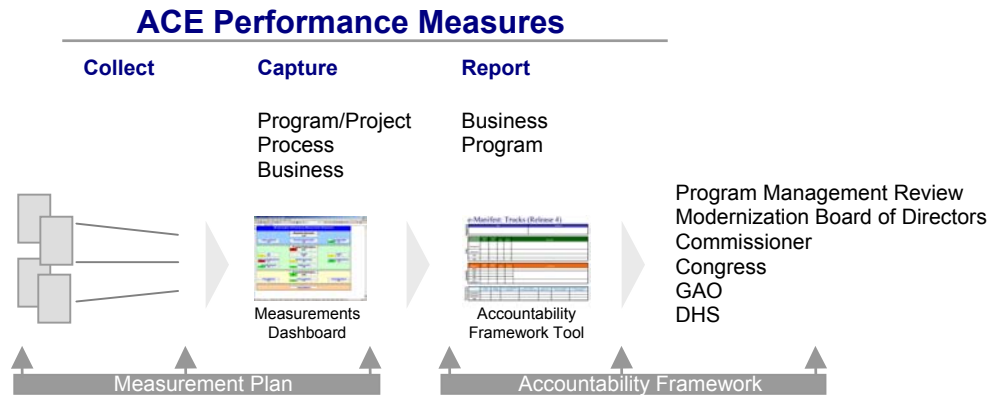

Fig. 1: ACE Performance Measures: Relationship between Measurements Dashboard and Accountability Framework Tool

- <u>Report in future expenditure plans progress against commitments contained in prior expenditure plans</u>. CBP has added a section to the FY06 Expenditure Plan that ties back to and tracks milestones and other program commitments made in all prior expenditure plans.

- <u>Ensure criteria for exiting key readiness milestones adequately consider indicators of system maturity, such as severity of open defects</u>. The Systems Development Lifecycle (SDLC) process has been moved under the Program Integration Division, and a single consolidated milestone gate review process is being instituted across all of OIT. In March 2005, exit criteria were defined and published on the OIT Process Asset Library for each milestone gate, including specific requirements to verify PTR measures and acceptable resolution plans, as required. The new integrated gate review process refines and enhances these exit criteria, and provides results to senior managers as part of the decision considerations for approving transition to the next SDLC stage. In November 2005, OIT issued new consolidated gate review information templates. These templates provide a common standard for preparing gate review presentations. Senior management reviews these presentations at formal gate reviews so that management decisions are based on consistent, timely information on project budget, risks, and security.

- <u>Establish clear and unambiguous delineation of the respective roles and responsibilities of the government and prime contractor</u>. A responsibility matrix and attendant narrative to delineate roles and responsibilities between the Government and the e-Customs Partnership has been developed and has been provided to the Department for review and routing to the GAO.

5. Cost and Schedule

5.1 Program Baseline

The Acquisition Program Baseline reflects a $3.3 billion, 8.5-year program, with completion of ACE development in July 2010. Baseline schedule and cost estimates were validated through the Independent Government Cost Estimate. Based on a review of future ACE releases and revisions to program inflation rate projections (discussed in the previous edition of this report), OIT anticipates that ACE development can be completed by January 2010 at a cost of $2.8 billion. Although CBP continues to manage to the acquisition program baseline, the agency is focused on meeting the aforementioned new cost and schedule targets.

5.2 Cost, Schedule, and Fiscal Status

During the first quarter of the 2006 fiscal year, CBP continued to expand the use of ACE capabilities. On October 7, 2005, CBP officers at the Fort Street Cargo Facility (Ambassador Bridge) began processing incoming trucks using ACE e-Manifest: Trucks (Release 4) capabilities. Officers are now using ACE to process incoming cargo in all 13 lanes at the facility. CBP also provided PGAs access to the ACE Secure Data Portal. Eighty users from twelve PGAs have been trained to use the ACE Secure Data Portal and can generate over 30 reports based on entry and manifest data.

The completion of the S1 PRR on December 22, 2005, initiated the operational pilot of new S&T capabilities, including a state-of-the-art business rules engine that allows targeting analysts to easily develop and test new rules without making software changes. S1 also provides screening capabilities for entry data and manifests for air, rail, sea, and truck modes of transportation. TASPO resumed use of performance based contracting and SDLC milestones to manage S2 Targeting Foundation, following the transition to the new S&T development approach (discussed in the previous edition of this report) that is based on augmenting ATS capabilities.

The deployment of ACE truck processing capabilities at the Fort Street Cargo Facility — the Nation's busiest land border port in terms of truck volume — further underscores the growing operational maturity of ACE. Nonetheless, the scale of this deployment generated lessons learned that, in turn, revealed the need for fixes and enhancements to ACE capabilities. As a result of the additional time required to fine-tune ACE operations and complete deployment activities in Detroit, deployment of e-Manifest: Trucks to land border ports in Vermont and New Hampshire, previously scheduled for November 2005, has been rescheduled for 2006. Overall, CBP is crafting plans to potentially complete deployment at all land border ports by the end of calendar year 2006.

As the last two editions of this report have emphasized, CBP remains focused on expanding use of the ACE electronic truck manifest. Submission of electronic manifests not only enhances the agency's ability to screen relatively low value "section 321"

shipments (a type of informal entry), but also automates key processes for CBP officers, enabling them to spend more time on key antiterrorism activities, such as interviewing drivers prior to granting entry to the United States. Carriers using e-manifests report they are seeing efficiencies, such as receipt of messages that shipments have cleared, which offset the cost of achieving Electronic Data Interchange (EDI) certification. Twenty-nine carriers and 8 service providers are now certified for EDI, and CBP seeks to further expand these numbers by working closely with freight carriers to assist with the EDI certification process. CBP has also enhanced e-Manifest: Trucks capabilities. In October 2005, CBP fielded enhancements that allow EDI transmissions to contain more than one message and provide support for service providers. The latter enhancement will support a planned future creation of non-portal accounts for carriers, whereby carriers without ACE accounts can file e-manifests through an authorized service provider with an ACE account. Each of these activities, in combination with continued deployment of ACE truck processing capabilities to land border ports, represents key preparations toward a future mandate to submit electronic manifests pursuant to the full implementation of the Customs Border Security Act of 2002.

Work on ACE Releases 5 and 6 continues based on plans outlined in the previous edition of this report to deliver ACE capabilities that hit the mark sooner at reduced cost. OIT has assigned a business director and a technical director to both Release 5 and 6 to provide appropriate oversight of quality, cost, and schedule. Business directors are responsible for ensuring that functional requirements will yield capabilities that meet the needs of front line CBP officers, affected CBP offices, the trade community, and PGAs. Technical directors are charged with ensuring that technical requirements support business requirements and provide the level of specificity required for efficient, high-quality development. To further ensure development of thorough requirements, OIT is "decomposing" the business logic of the Automated Commercial System to finalize business rules for Release 5 and 6 capabilities. This process effectively cross-checks ACE business and technical requirements so that OIT does not overlook key CBP and PGA operational and business process requirements that are embedded in the legacy systems that have been in use for the past two decades.

The FY 2006 Modernization Expenditure Plan is consistent with the Department of Homeland Security Appropriation Act, 2006, (Public Law 109-90). The plan requests $318.5 million for ACE and ITDS. Among the key elements are:

- detailed design and development of cargo management and S&T capabilities;

- continued deployment of ACE truck processing capabilities at land border ports; and

- design and development of PGA requirements for ACE/ITDS.

Figure 1 provides a summary of ACE funding. To date, Congress has appropriated $1.71 billion and released $1.39 billion for ACE/ITDS. Of the $1.39 billion, $1.26 billion

has been obligated, and $1.1 billion has been expended (91 percent and 79 percent of released funding, respectively) as of October 31, 2005.
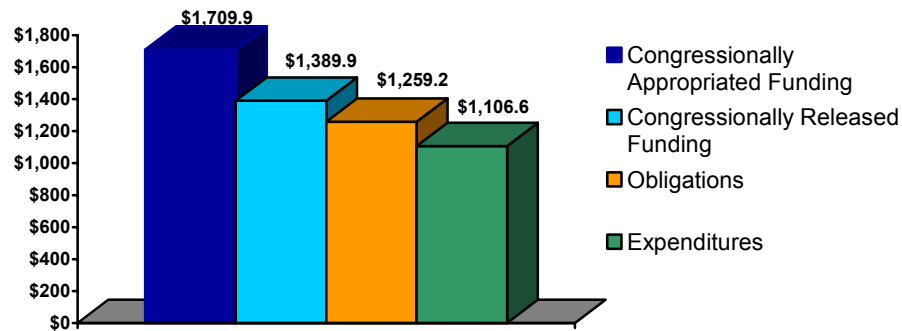

Fig. 2: ACE and ITDS Funding Status as of October 31, 2005

6. Near-Term Milestones

The following are key near-term milestones scheduled between January 1, 2006, and March 31, 2006.

January 2006

- CBP projects that ACE electronic truck manifest capabilities will be deployed to Eagle Pass and Del Rio, Texas.

February 2006

- S1 training will be initiated to provide insight on the new capabilities being released.

- OIT will complete the S1 Operational Readiness Review on February 9, 2006, signaling the transition of S1 capabilities to a full production system.

- OIT will conduct the S2 Critical Design Review on February 28, 2006.

- CBP projects that ACE electronic truck manifest capabilities will be deployed to El Paso, Texas, and surrounding ports (including the Bridge of the Americas and Ysleta); Presidio, Texas; and Santa Teresa and Columbus, New Mexico.

- OIT will complete the PDCR for Release 6, e-Manifest: Rail and Sea on February 17, 2006. Completion of the PDCR will demonstrate that user and functional requirements are defined, major project risks have been addressed, and system design and development can begin.

February/March 2006

- CBP projects that ACE electronic truck manifest capabilities will be deployed to Laredo, Texas, and surrounding ports (including the Colombia Solidarity Bridge and World Trade Bridge).

- A Trade Support Network (TSN) Conference will be held February 28 through March 2, 2006, in Manhattan Beach, California. The conference provides TSN members with an opportunity to meet and discuss ACE related issues, receive updates and provide feedback on ACE capabilities, and receive a status report on ACE implementation dates.

7.   Conclusion

The ACE program continues to deliver and develop capabilities that will secure our Nation's borders and facilitate legitimate trade. The operation of e-Manifest: Trucks capabilities at the Fort Street Cargo facility in Detroit, Michigan, provides yet more evidence of the growing operational maturity of ACE capabilities. The pilot of S1 capabilities, which includes an enhanced rules engine, will provide new tools to National Targeting Center analysts and thereby enhance the screening of all entry and manifest transactions. By providing PGAs access to certain ACE data, the Government has completed an important step toward realizing the ITDS vision of a single window for the collection and dissemination of trade data. As use of the monthly statement continues to grow, greater participation is expected through the creation of non-portal accounts. The delivery of the new FTZ system will improve FTZ processing for the trade community and enhance the ability of CBP to screen FTZ admission data for national security, enforcement, and regulatory compliance purposes.

CBP has increased government oversight of new development efforts, and is preparing to introduce new measurement and reporting tools that will help ensure that program commitments are upheld and that ACE delivers expected business results. These results include securing incoming cargo and facilitating the legitimate trade that is the basis for the safety of the American people and foundation of our nation's economic strength. As stewards of the American taxpayer's investment in ACE, CBP will continue to carefully manage the ACE program as it expands e-Manifest: Trucks nationwide and develops new secure cargo management and S&T capabilities.

For More Information:

Additional information on ACE may be found on the CBP Web site (www.cbp.gov) under the Modernization and ACE link.

The first five reports to Congress on ACE may be found on the CBP Web site at http://www.cbp.gov/xp/cgov/toolbox/about/modernization/newsletters/quarterly_reports/.

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Appendix A. ACE Implementation and Capabilities

ACE will deliver increased border security and enable improved trade compliance. It will also increase efficiency and improve customer service for key stakeholders, which include importers, brokers, carriers, and other Government agencies.

In June 2003, ACE Account Creation was launched with 41 initial importer accounts given access to the ACE Secure Data Portal. Account Creation provides initial on-line account capabilities to CBP and the trade community.

Periodic Payment was launched in June 2004, and an Operational Readiness Review was successfully conducted in August 2004. It allows importers and brokers with ACE accounts to centralize payment processing and to utilize periodic monthly statement and payment capabilities through Automated Clearinghouse Credit and Debit. This release also provides an initial customer account-based subsidiary ledger interface with the CBP general ledger for financial transaction processing, and will provide an expanded account view into account activity logs and exam findings.

Periodic Payment expanded the account management framework to a larger trade audience, including brokers, carriers, and CBP representatives overseeing those areas. The Account Profiles for importers, brokers, and carriers will support some information relevant to the Customs-Trade Partnership Against Terrorism (C-TPAT). A Significant Activities Log provides a record of communications between the account and CBP (and ultimately with PGAs).

e-Manifest: Trucks capabilities, including an automated truck manifest, expedited information processing, and a primary inspector interface (consolidating seven separate cargo release systems), were piloted in Blaine, Washington, in December 2004. Following completion of the pilot, e-Manifest: Trucks capabilities have been deployed to selected Northern and Southern Border ports near select hub cities.

In December 2005, S1 capabilities were piloted at the National Targeting Center in preparation for transition to full production capability. S1 provides a robust business rules engine to allow easy creation and assessment of rules for air, rail, sea, and truck modes of transportation.

The following is an outline of the features in future ACE releases.

ACE Secure Cargo Management Capabilities

Entry Summary, Accounts, and Revenue (Release 5)
- Master Data and Enhanced Accounts
  - All account types, including broker, carrier, FTZ operator, Container Examination Station, Container Freight Station, importer, surety, etc.

– Program participation automation for C-TPAT Administrative messaging
– Master and reference data in ACE

- Entry Summary and Revenue
  – Entry summary and team review
  – Post-release processing
  – Quota
  – Initial protest
  – Reconciliation
  – Bond sufficiency
  – Finance processing
  – Revenue and refund processing
  – Billing and payment processing (including cash, Electronic Funds Transfer, and lockbox)
  – Maintain CBP and non-CBP licenses, permits, and certificates
  – Program participation automation for Managed Accounts and Container Security Initiative

e-Manifest: All Modes & Cargo Security (Release 6)
- e-Manifest: Rail and Sea
  – Cargo manifest processing for sea/rail modes of transportation and conversion of cargo control databases to multi-modal format
  – Initial Multi-Modal Manifest reporting
  – New JAVA ("Windows") base presentation for CBP internal users
  – Enhanced information reporting & cargo control capabilities (vessel stowage plan, expanded inter-modal event reporting by trade partners)
  – Enhanced data sharing with participating Government agencies (PGA).

- e-Manifest: Air
  – Cargo manifest processing and shared multi-modal database with sea/rail modes of transportation
  – Enhanced data sharing with participating Government agencies (PGA).

- e-Manifest: Enhanced Tracking
  – Modernization of Cargo Selectivity "entry" processing (cargo release) in ACE
  – Accept all major entry types

Exports & Cargo Control (Release 7) ESAR:
- Drawback, Protest, and Importer Activity Summary Statement (IASS)
  – Drawback
  – Enhanced protest
  – IASS
  – United States Principal Party of Interest Accounts

- Final Exports and Manifest Cargo, Transactions, and Enforcement :
  - Manifest, e-Release, enforcement, and tracking for mail, hand-carry, and pipeline
  - Export processing (modernization of deployed Automated Export System application)

ACE S&T Capabilities

Targeting Foundation (S2)
- Extended criteria management and execution for entry summary related screening
- Initial targeting analysis foundation and criteria impact assessment
- Access to targeting analysis tools (e.g., Request for Information workflow, link analysis, and statistical analysis)
- Integration of commercial data sources

Advanced Targeting (S3)
- Extended targeting functionality
- Extended screening capability to include additional areas (e.g. drawback, protests, reconciliation)
- Support for inter-modal manifest
- In-bond and warehouse movements
- Completion of the risk management circle
- Feedback loop
- Automated rules
- Bayesian network and analysis
- Cluster analysis and pattern recognition tools
- Enhanced criteria management and criteria impact assessment

Full Screening and Targeting (S4)
- Provide full functionality for all modes of transportation and all transactions
- Full targeting and analysis platform
- Complete S&T capability for all PGAs
- Exports
- Artificial intelligence / neural nets
- Geo-spatial visualization
- Recommended actions

Appendix B. Alignment of ACE Releases with the Modernization Act, Subtitle B Automation Requirements

Percentage of Functionality Completed: 10%, 25%, 50%, 75%, 90%, 100%

Modernization Act National Customs Automation Program HR 3450, Subtitle B, Sec. 631	ACE Foundation and Account Creation (Releases 1 and 2)	Periodic Payment (Release 3)	e-Manifest: Trucks (Release 4)	Screening Foundation (Screening S1)	Targeting Foundation (Screening S2)	Entry Summary, Accounts and Revenue (A1, A2 - Release 5)	Advanced Targeting (Screening S3)	Full Screening and Targeting (Screening S4)	e-Manifest: All Modes and Cargo Security (M1, M2, M3- Release 6)	Exports and Cargo Control (A3, M4 - Release 7)
Electronic entry of merchandise *Sec. 411(a)(1)(A)*									90%	100%
Electronic entry summary of required information *Sec. 411(a)(1)(B)*						75%				100%
Electronic transmission of invoice information *Sec. 411(a)(1)(C)*						25%				100%
Electronic transmission of manifest information *Sec. 411(a)(1)(D)*			25%						90%	100%
Electronic payment of duties, fees, and taxes *Se c. 411(a)(1)(E)*		10%				75%				100%
Electronic status of liquidationlandreliquidation *Sec. 411(a)(1)(F)*						90%				100%
Electronic selection of high risk entries for examination:										
(1) cargo Screening and			10%	50%			90%	75%		
(2) entry summary screening *Sec. 411(a)(1)(G)*					75%			100%		
Electronic filing and status of protests *Sec. 411(a)(2)(A)*										100%
Electronic filing (including remote filing under section 414) of entry information with the Customs Service *Sec. 411(a)(2)(B)*									90%	100%

Appendix C. ACE Performance Measures

While Desired Business Results (DBRs) provide the ACE program with a framework for making business and technical architecture decisions with respect to overall value considerations, specific performance goals, and measures ultimately support the CBP Automation Modernization budget. Examples of ACE efficiency, workload, and deployment measures are provided in the table below. Further detailed information can be found in the *Revision of the ACE DBRs and ACE Release Level DBR Objects and DBR Measures, Version 17.5, September 23, 2005.*

Measure		FY05	FY06	FY07	FY08	FY09	FY10	FY11
Account Creation (Release 2)								
Percent of internal CBP population using ACE functionality to manage trade information	Plan Actual	11% 8%	18%	26%	26%	63%	100%	100%
Percent of trade accounts with access to ACE functionality to manage trade information	Plan Actual	2% .8%	6%	11%	13%	16%	47%	100%
Periodic Payment (Release 3)								
Percent of total duties and fees paid through Periodic Monthly Statements	Plan Actual	20% 10.9%	30%	40%	50%	60%	70%	80%
e-Manifest: Trucks (Release 4)								

Percent reduction of CBP truck processing time (measured from the baseline established at each Port of Entry)
     Nogales, AZ *
     Pembina, ND*
	Plan
	Actual
		6%
		
		+70%
		+14%
			18%	25%	25%	25%	25%	25%

Percent of truck manifests that are filed electronically at each Port of Entry	Plan Actual	5% .3%	20%	65%	100%	100%	100%	100%
Entry Summary, Accounts and Revenue (Release 5)								
Percent reduction in manual entry summary processes	Plan Actual			85%	85%	85%	85%	85%
Percent of electronic monthly Automated Broker Interface (ABI) Statements	Plan Actual			0%	10%	25%	50%	75%
e-Manifest: All Modes and Cargo Security (Release 6)								
Percent increase of information shared across all modes of transportation to be used to enhance national security	Plan Actual				5%	10%	20%	30%
Percent of cargo being reported to CBP by the custodial carrier on behalf of the carrier that initiated the cargo movement	Plan Actual				5%	10%	20%	25%
Exports and Cargo Control (Release 7)								
(Performance Measures for Release 7 will be developed as part of the requirements development process scheduled to begin in FY08)	Plan Actual							
Screening Foundation (S1)								
Total number of linked electronic sources from CBP and other government agencies for targeting information	Plan Actual	0	4	9	9	9	23	23
Number of manifests where CBP officers forecasted workload levels through impact assessments within 15 minutes	Plan Actual		100,000	100,000	100,000	100,000	100,000	100,000
Targeting Foundation (S2)								
Percent reduction of person of interest passenger information responses taking more than 15 minutes	Plan Actual		70%	75%	75%	75%	75%	75%
Number of CBP targeting platform portal accounts	Plan Actual		2,000	5,000	10,000	10,000	10,000	10,000
Advanced Targeting (S3)								
Number of Government agencies with access to S&T systems	Plan Actual		1	6	10	12	12	12
Number of external (non-CBP) data sources integrated into the Targeting Platform	Plan Actual		4	6	8	10	10	10
Full Screening and Targeting (S4)								
(Performance Measures for Release S4 will be developed as part of the requirements development process scheduled to begin in FY07)	Plan Actual							

* Percentage change figures based on partial post-deployment processing time analyses conducted at Nogales, Arizona, and Pembina, North Dakota, in September 2005 and November 2005, respectively. Data refinement and trend analysis is continuing. Processing time increases are expected to be temporary and likely due to system user learning curve resulting from ACE as a new business process tool.

Appendix D. Desired Business Results

CBP executives defined DBRs that will contribute to the achievement of CBP strategic objectives and the benefits outlined in the ACE Cost Benefit Analysis. These DBRs reflect current CBP and DHS priorities. The table below depicts these DBRs and the alignment of the ACE releases.

Release Functionality / ACE Desired Business Results	Account Creation — Release 2	Periodic Payment — Release 3	e-Manifest: Trucks — Release 4	Entry Summary, Accounts, & Revenue — Release 5	e-Manifest: All Modes & Cargo Security — Release 6	Exports & Cargo Control — Release 7	Selectivity & Targeting — Selectivity S1-S4
1. Improve accuracy and timeliness of information to support threat assessment decisions	✓		✓	✓	✓	✓	✓
2. Improve detection of trafficking in prohibited and restricted goods	✓		✓	✓	✓	✓	✓
3. Detect and remedy unfair trade practices and illegal activities	✓		✓	✓	✓	✓	✓
4. Enable modern commercial business practices of the trade community	✓	✓	✓	✓	✓	✓	
5. Safeguard the revenue of the government	✓	✓		✓	✓	✓	
6. Integrate PGA participation for executing regulatory requirements	✓	✓	✓	✓	✓	✓	✓
7. Enable increased compliance rates through the use of efficient and effective informed and enforced compliance processes	✓	✓	✓	✓	✓	✓	
8. Enable and accounts-based approach	✓	✓		✓		✓	
9. Improve responsiveness and adaptability to policy, statutory, and regulatory changes, and trade volume increases	✓		✓	✓	✓	✓	
10. Provide a single interface to the trade community	✓	✓		✓		✓	
11. Improve workload management	✓	✓	✓	✓	✓	✓	✓

Appendix E. Accountability Framework Tool

The following chart, although not yet populated with data, illustrates the categories of data that will be captured on ACE capabilities, cost, schedule, EVM indicators, risks, mission values and benefits, and business performance measures.

e-Manifest: Trucks (Release 4)

Capabilities

Plan	Comments

Cost

	Original Plan	Current Plan	Est.	Actual	Comments
Development					
Deployment					
O&M					
Total					

Schedule

Milestone	Original Plan	Current Plan	Est.	Actual	Comments
PDCR					
CDR					
PRR					
ORR					
Full Deployment					

Earned Value

	Contract Value	Percent Complete	Cum. Cost Performance Index (CPI)	Cum. Schedule Performance Index (SPI)	Cum. Cost Variance (CV)	Variance at Completion (VAC) Projected	Variance at Completion (VAC) Percent
Development							
Deployment							
O&M							

Appendix E, continued

The following chart, although not yet populated with data, illustrates the categories of data that will be captured on ACE capabilities, cost, schedule, EVM indicators, risks, mission values and benefits, and business performance measures.

e-Manifest: Trucks (Release 4)

Risk

Risk Statement	Mitigation Actions

Mission Value/Benefits

DHS Strategic Goal	CBP Strategic Goal	ACE CBA Benefits	ACE DBR	ACE DBR Objective	Release Objective

Performance Measures

Performance Measure	FY05 Plan	FY05 Actual	FY06 Plan	FY06 Actual	FY07 Plan	FY07 Actual	FY08 Plan	FY08 Actual	FY09 Plan	FY09 Actual	FY10 Plan	FY10 Actual	FY11 Plan	FY11 Actual	Comments

Appendix F. Schedule Outlook

The following table compares ACE Program Plan Version 11.2 Development Milestones (program baseline) with current projections.

Release Name	Key Milestone	ACE Program Plan Version 11 (Baseline)	Current Outlook
ESAR (Release 5)			
• Master Data and Enhanced Accounts	PRR	07/17/06	10/02/06
	ORR	12/19/06	12/29/06
	FOC*	01/19/07	01/29/07
• Entry Summary and Revenue	PRR	07/17/06	07/02/07
	ORR	12/19/06	10/01/07
	FOC	01/19/07	11/01/07
e-Manifest: All Modes and Cargo Security (Release 6)			
• e-Manifest: Rail and Sea	PRR	11/03/08	10/02/06
	ORR	04/06/09	12/29/06
	FOC	04/06/10	12/29/07
• e-Manifest: Air	PRR	11/03/08	07/02/07
	ORR	04/06/09	10/01/07
	FOC	04/06/10	10/01/08
• e-Manifest: Enhanced Tracking	PRR	11/03/08	03/02/09
	ORR	04/06/09	06/01/09
	FOC	05/06/09	07/01/09
Exports and Cargo Control (Release 7)	PRR	02/15/10	9/30/09
	ORR	07/16/10	12/31/09
	FOC	08/16/10	01/31/10
Screening Foundation (S1)	PRR	08/18/05	12/22/05
	ORR	11/10/05	02/09/06
	FOC	12/01/05	03/09/06
Targeting Foundation (S2)	PRR	04/27/06	08/17/06
	ORR	07/20/06	09/21/06
	FOC	08/20/06	10/28/06
Advanced Targeting (S3)	PRR	11/29/06	1/18/07
	ORR	02/28/07	02/22/07
	FOC	03/28/07	03/22/07
Full S&T (S4)	PRR	07/21/09	10/25/07
	ORR	10/13/09	12/13/07
	FOC	11/13/09	01/06/08

*Full Operational Capability (FOC) reflects the date by which releases will be fully deployed nationwide.

Appendix G. Acronyms and Selected Definitions

ABI	Automated Broker Interface
ACE	Automated Commercial Environment. The first major project of U.S. Customs and Border Protection Modernization. Through enhanced business processes and the new technology in ACE that will support them, border security and trade facilitation will be greatly enhanced.
ACH	Automated Clearinghouse
APB	Acquisition Program Baseline
ATDI	Advance Trade Data Initiative
ATS	Automated Targeting System
CBP	U.S. Customs and Border Protection
CSPO	Cargo Systems Program Office: The program office responsible for ACE cargo management capabilities and other cargo processing systems
C-TPAT	Customs-Trade Partnership Against Terrorism
DISM	Data Integration Services Manager
DHS	Department of Homeland Security
EA	Enterprise Architecture
EDI	Electronic Data Interchange
ESAR	Entry Summary, Accounts, and Review
EVM	Earned Value Management
FAST	Free and Secure Trade
FOC	Full Operational Capability
FTZ	Foreign Trade Zone
FY	Fiscal Year
GAO	Government Accountability Office
HC	Human Capital
HCM	Human Capital Management
ITDS	International Trade Data System
LCCE	Life-Cycle Cost Estimate
LCCM	Life-Cycle Cost Model

MiKE	Metadata Knowledge Enterprise
OIT	Office of Information and Technology
ORR	Operational Readiness Review
PGA	Participating Government Agency
PRR	Production Readiness Review
PTR	Problem Trouble Report
SDLC	Software Development Lifecycle
S&T	Screening and Targeting
TASPO	Targeting and Analysis Systems Program Office: The program office responsible for Screening and Targeting systems, including ATS and ACE S&T development efforts